

PROJECT
LAKE LIVINGSTON STATE PARK
ROOF REPLACEMENT

PROJECT NO: MR10354 DATE: MAY 7, 2020

INDEX OF DRAWINGS

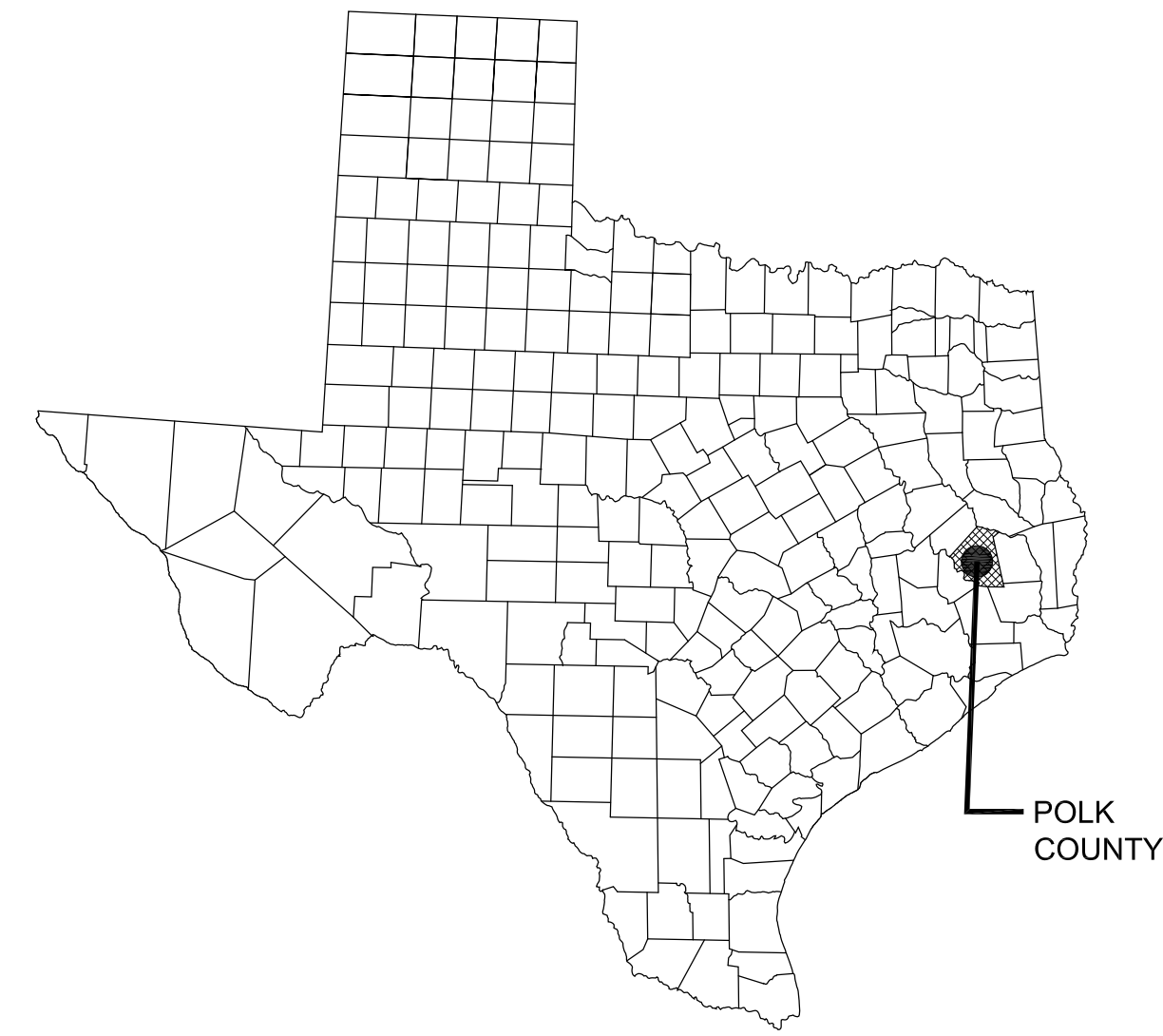
SHEET NO.	DESCRIPTION
-	COVER SHEET
A0	ABBREVIATIONS, NOTES AND SUBMITTALS
A1	ROOF PLAN & PHOTOS
A2	ROOF DETAILS
S1	DETAILS AND NOTES

BUILDING CODE SUMMARY

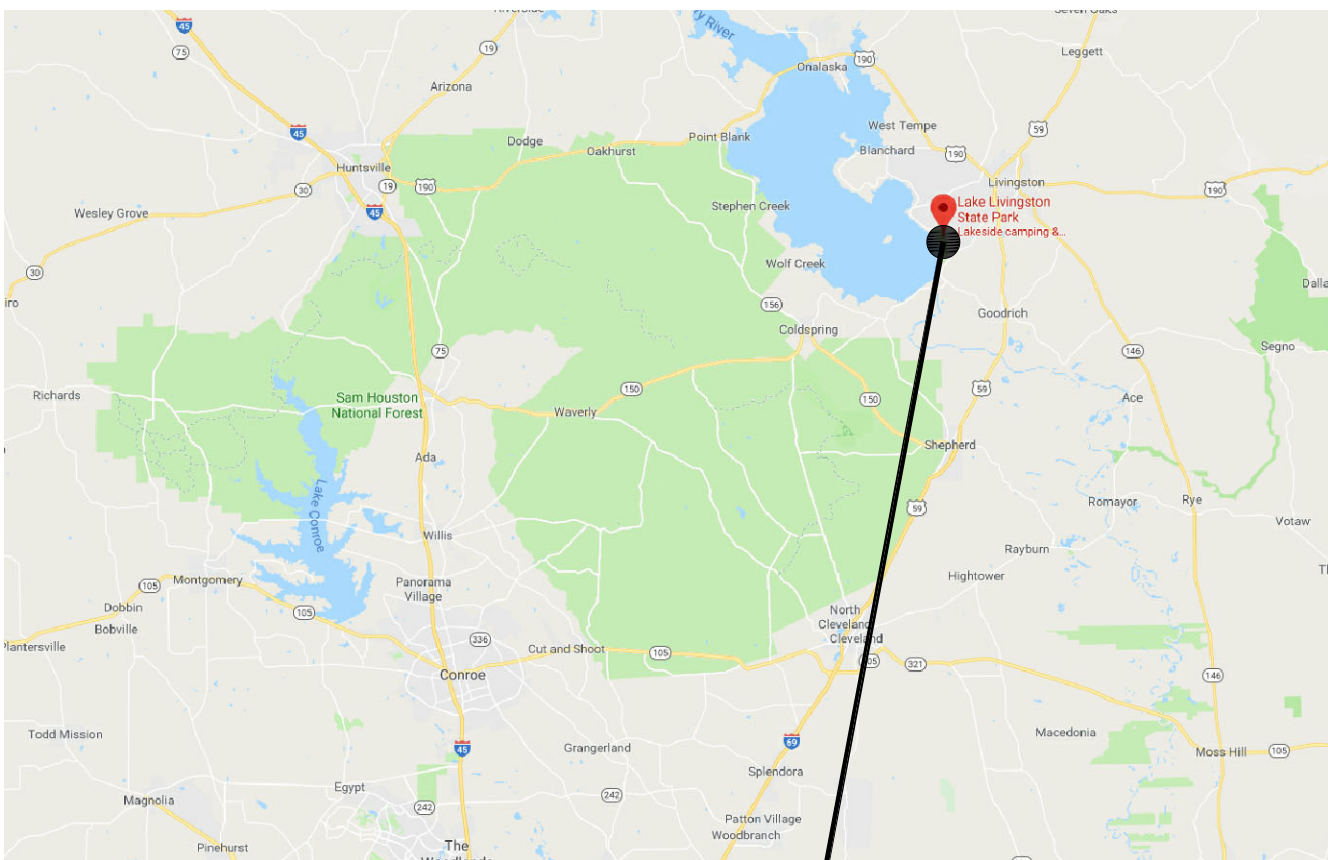
- A. INTERNATIONAL CODE COUNCIL ADOPTIONS*
1. BUILDING CODE INTERNATIONAL BUILDING CODE 2015
 2. STRUCTURAL CODE INTERNATIONAL BUILDING CODE 2015
 3. PLUMBING CODE INTERNATIONAL PLUMBING CODE 2015
 4. MECHANICAL CODE INTERNATIONAL MECHANICAL CODE 2015
 5. GAS CODE INTERNATIONAL FUEL GAS CODE 2015
 6. RESIDENTIAL CODE INTERNATIONAL RESIDENTIAL CODE 2015
 7. EXISTING BUILDINGS INTERNATIONAL EXISTING BUILDINGS CODE 2015
- * International Fire Code omitted in lieu of TPWD's implementation of National Fire Protection Association codes. International Energy Conservation Code 2015 omitted in lieu of Energy Standard for Buildings, ASHRAE/IESNA Standard 90.1 (2013).
- B. NATIONAL FIRE PROTECTION ASSOCIATION
1. ELECTRIC CODE NATIONAL ELECTRICAL CODE NFPA-70 2017
 2. FIRE CODE NFPA - 1 2015
 3. LIFE SAFETY CODE NFPA - 101 2015
- C. STATE ENERGY CONSERVATION OFFICE (SECO)/TEXAS COMPTROLLERS OFFICE
1. ENERGY CODES FOR STATE BUILDINGS - See Energy Conservation Design Standards: Texas Administrative Code, Title 34, Part 1, Ch.19, Subchapter C
 - a. COMPLIANCE WITH THE ENERGY CONSERVATION DESIGN STANDARD OF THE AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE) / ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA), ENERGY STANDARD FOR BUILDINGS, ASHRAE/IESNA STANDARD 90.1 (2013)See SECO website for State Funded Buildings, New Construction and Major Renovation Requirements and SECO Compliance Certification Forms
 2. WATER CONSERVATION STANDARDS FOR STATE BUILDINGS - Energy Conservation Design Standards: Texas Administrative Code, Title 34, Part 1, Ch.19, Subchapter C
 - a. COMPLIANCE WITH THE WATER CONSERVATION DESIGN STANDARDS FOR STATE BUILDINGS AND INSTITUTIONS OF HIGHER EDUCATION FACILITIES, STATE ENERGY CONSERVATION OFFICE (SECO), 2016See SECO website for Texas Water Conservation Design Standards, Requirements and SECO Compliance Certification / Reporting Form
- D. ACCESSIBILITY CODES
1. US DEPT. OF JUSTICE, 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN
 2. ARCHITECTURAL BARRIERS ACT ACCESSIBILITY GUIDELINES; OUTDOOR DEVELOPED AREAS, NOVEMBER 25, 2013
 3. 2012 TEXAS ACCESSIBILITY STANDARDS, ELIMINATION OF ARCHITECTURAL BARRIERS, TEXAS GOVERNMENT CODE, CHAPTER 469
- E. PLAYGROUND SAFETY CODE
1. ASTM F1487-17, STANDARD CONSUMER SAFETY PERFORMANCE SPECIFICATIONS FOR PLAYGROUND EQUIPMENT FOR PUBLIC USE
 2. ASTM F2223-15, STANDARD GUIDE FOR ASTM STANDARDS ON PLAYGROUND SURFACING

SCOPE OF WORK

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT, TOOLS, MATERIALS, AND INCIDENTALS NECESSARY TO REMOVE THE EXISTING ROOFING PANELS, REPAIR WOOD TRUSS, REPLACE DAMAGED DECKING AND PURLINS, AND INSTALL NEW ROOF ON THE MAINTENANCE BUILDING AT LAKE LIVINGSTON STATE PARK.

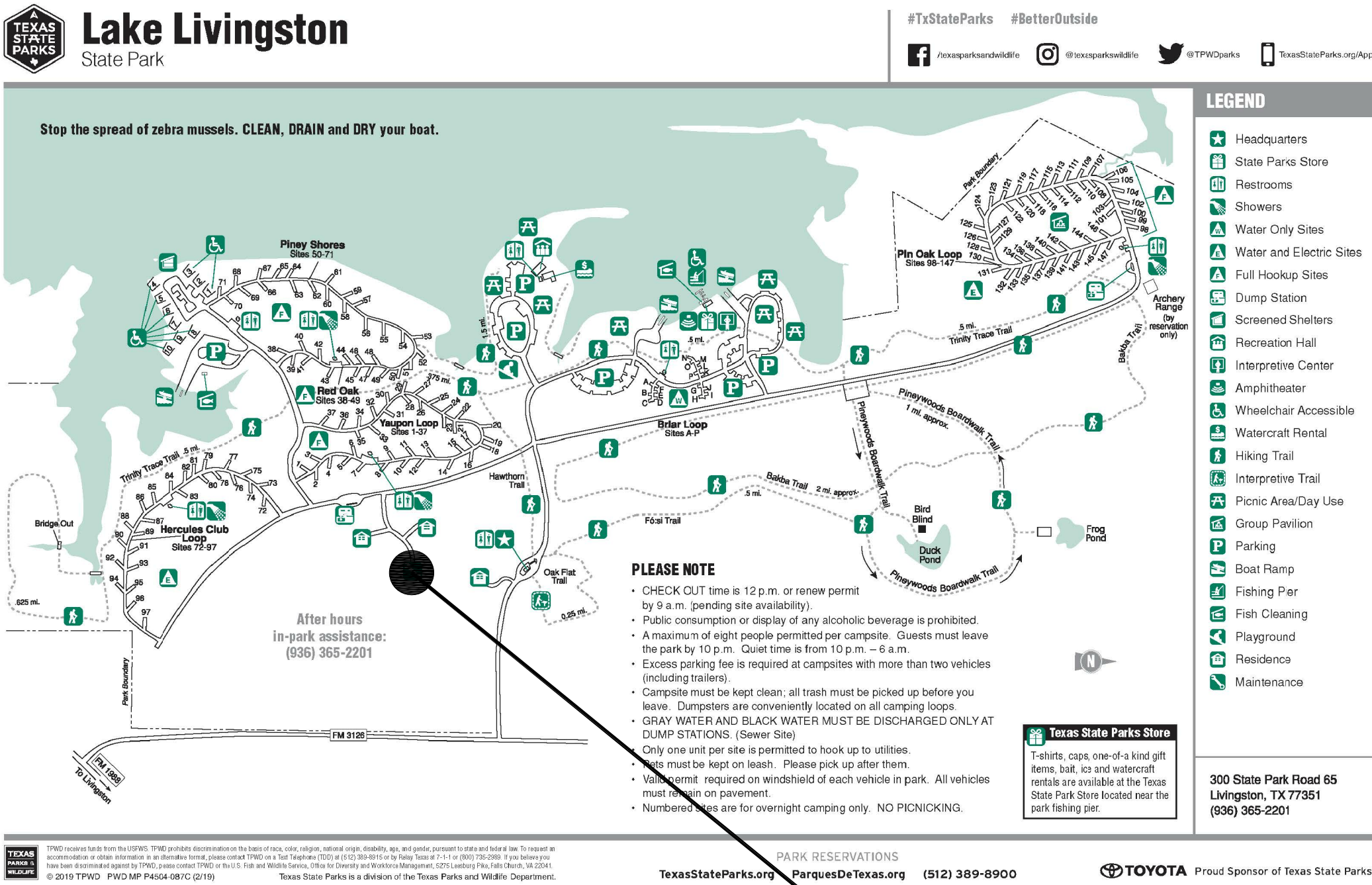


COUNTY LOCATION MAP
NOT TO SCALE



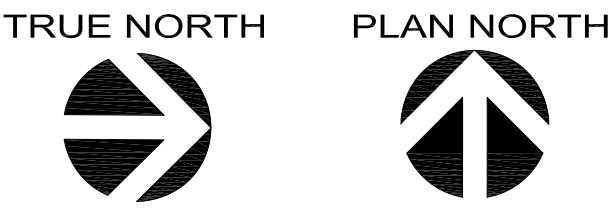
PROJECT SITE

VICINITY MAP
NOT TO SCALE



PROJECT SITE

SITE LOCATION MAP
NOT TO SCALE



TPWD TEAM

PROJECT MANAGER

Tony Bettis
Texas Parks & Wildlife
512-389-8382
512-389-4790 (fax)
tony.bettis@tpwd.texas.gov

DESIGN MANAGER

Quana Childs
Texas Parks & Wildlife
512-389-8710
512-389-4790 (fax)
quana.childs@tpwd.texas.gov

INSPECTOR

Keith Moore
Texas Parks & Wildlife
512-627-4373
keith.moore@tpwd.texas.gov

PARK SUPERINTENDENT

David Weeks
Texas Parks & Wildlife
936-365-2201
david.weeks@tpwd.texas.gov

CONTRACT MANAGER

JoAnn Hernandez
Texas Parks & Wildlife
512-389-4347
512-389-4790 (fax)
joann.hernandez@tpwd.texas.gov

CONSTRUCTION MANAGER

Gary Holmes
Texas Parks & Wildlife
512-627-4296
gary.holmes@tpwd.texas.gov

DESIGN TEAM

ARCHITECT

Raluca Zamfir
PDG Architects
713-629-6100
713-629-6123 (fax)
rzamfir@pdgarchitects.com

TEXAS
PARKS &
WILDLIFE

TEXAS PARKS AND WILDLIFE
INFRASTRUCTURE DIVISION

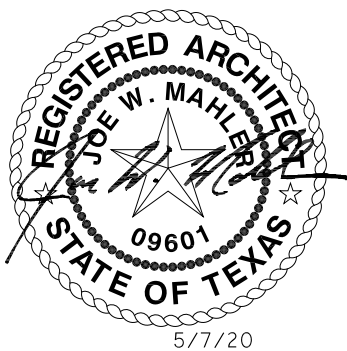
4200 SMITH SCHOOL ROAD · AUSTIN, TEXAS 78744-3292

RELEASED FOR SOLICITATION

PROJECT MANAGER, INFRASTRUCTURE DIVISION
Christy Seals
DESIGN BRANCH MANAGER, INFRASTRUCTURE DIVISION

5/14/2020
DATE

5/26/20
DATE



ABBREVIATIONS			
ACoust	ACOUSTICAL	LAM	LAMINATE
AFF	ABOVE FINISHED FLOOR	LAV	LAVATORY
ADD	ADDITION	LB	POUND
ADJ	ADJUSTABLE	LBL	LABEL
AC	AIR CONDITIONING	LWT	LIGHTWEIGHT
ALT	ALTERNATE		
ALUM	ALUMINUM	MACH	MACHINE
APPROX	APPROXIMATE	MAINT	MAINTENANCE
APPVD	APPROVED	MATL	MATERIAL
ARCH	ARCHITECT	MAX	MAXIMUM
AVE	AVENUE	MBR	MEMBER
		MC	MEDICINE CABINET
BD	BOARD	MECH	MECHANICAL
BETW	BETWEEN	MEP	MECHAN/ELEC/PLMB
BLDG	BUILDING	MFR	MANUFACTURER
BLKG	BLOCKING	MGR	MANAGER
BM	BEAM OR BENCH MARK	MIN	MINIMUM
BOT	BOTTOM	MISC	MISCELLANEOUS
BRZ	BRONZE	MK	MARK
BSMT	BASEMENT	MLDG	MOULDING
		MO	MASONRY OPENING
C TO C	CENTER TO CENTER	MSNRY	MASONRY
CAB	CABINET	MTD	MOUNTED
CER	CERAMIC	MTL	METAL
CJ	CONSTRUCTION JOINT/CONTROL JOINT	MUL	MULLION
		MW	MICROWAVE
CL	CENTER LINE		
CLG	CEILING	NIC	NOT IN CONTRACT
CLR	CLEAR	NO	NUMBER
CLOS	CLOSET	NOM	NOMINAL
CMU	CONCRETE MASONRY UNIT	NTS	NOT TO SCALE
CO	CLEANOUT	OA	OVERALL
COL	COLUMN	OC	ON CENTER
CONC	CONCRETE	OD	OUTSIDE DIAMETER
CONSTR	CONSTRUCTION	OH	OPPOSITE HAND
CONT	CONTINUOUS	OPNG	OPENINGS
CONTD	CONTINUED	OPP	OPPOSITE
CONTR	CONTRACTOR	ORIG	ORIGINAL
COR	CONTRACTING OFFICER'S REPRESENTATIVE	OVHD	OVERHEAD
		OZ	OUNCE
CTR	CENTER	PART	PARTIAL
CW	COLD WATER	PART BD	PARTICLE BOARD
		PL	PROPERTY LINE
DBL	DOUBLE	PLAM	PLASTIC LAMINATE
DET	DETAIL	PLMB	PLUMBING
DF	DRINKING FOUNTAIN	PLYWD	PLYWOOD
DIA	DIAMETER	PREFAB	PREFABRICATED
DIAG	DIAGONAL	PR	PAIR
DIM	DIMENSION	PROP	PROPERTY
DIV	DIVISION	PSI	POUNDS PER SQ IN
DEMO	DEMOLITION	PTD	PAINTED
DN	DOWN		
DR	DOOR	RA	RETURN AIR
DS	DOWNSPOUT	RAD	RADIUS
DWG	DRAWING	RAG	RETURN AIR GRILL
DWR	DRAWER	RE	REFER
EA	EACH	REC	RECESSED
ELEV	ELEVATION	RECEPT	RECEPTACLE
ELEC	ELECTRICAL	RECT	RECTANGULAR
ENCL	ENCLOSURE	RELOC	RELOCATED
ENGR	ENGINEER	REQD	REQUIRED
EQ	EQUAL	REP	REPRESENTATIVE
EQUIP	EQUIPMENT	RESIL	RESILIENT
ETC	AND SO FORTH	REV	REVISION
EW	ELECTRIC WATER COOLER	RH	RIGHT HAND
		RM	ROOM
		RND	ROUND
		RO	ROUGH OPENING
		RTN	RETURN
EXH	EXHAUST		
EXTG	EXISTING		
EXP	EXPOSED	SC	SOLID CORE
EXT	EXTERIOR	SCHED	SCHEDULE
FD	FLOOR DRAIN	SECT	SECTION
FE	FIRE EXTINGUISHER	SEQ	SEQUENCE
FEC	FIRE EXTINGUISHER CABINET	SF	SQUARE FEET
		SQL	SINGLE
FED	FEDERAL	SH	SHEET
FF	FINISHED FLOOR	SIM	SIMILAR
FV	FIELD VERIFY	SPEC	SPECIFICATION
		SO	SQUARE
FHC	FIRE HOSE CABINET	SS	STAINLESS STEEL
FL	FLOW LINE	STD	STANDARD
FLR	FLOOR	STL	STEEL
FPRF	FIREPROOF	STOR	STORAGE
FR	FRAME	STRUCT	STRUCTURAL
FTG	FOOTING	SURF	SURFACE
FURR	FURRING	SUSP	SUSPENDED
FW	FIRE WALL		
FXTR	FIXTURE	TECH	TECHNICAL
		TELE	TELEPHONE
GA	GAUGE	THK	THICK (NESS)
GALV	GALVANIZED	THRU	THROUGH
GEN	GENERAL	TYP	TYPICAL
GFE	GOVERNMENT FURNISHED EQUIPMENT		
GFM	GOVERNMENT FURNISHED MATERIAL	UNFIN	UNFINISHED
		UNO	UNLESS NOTED OTHERWISE
GL	GLASS		
GOVT	GOVERNMENT		
GRL	GRILLE	VENT	VENTILATE
GYP	GYP SUM	VERT	VERTICAL
GYP BD	GYP SUM BOARD	VCT	VINYL
GC	GENERAL CONTRACTOR		COMPOSITION TILE
		VET	VINYL ENHANCED TILE
HDWR	HARDWARE	VOL	VOLUME
HM	HOLLOW METAL	VWC	VINYL WALLCOVERING
HORIZ	HORIZONTAL		
HT	HEIGHT		
HTR	HEATER	WD	WOOD
HWD	HARDWOOD	WH	WATER HEATER
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	WHSE	WAREHOUSE
		WP	WATERPROOF
HW	HOT WATER	W	WITH
HWH	HOT WATER HEATER	W/O	WITHOUT
		WT	WEIGHT
ID	INSIDE DIAMETER		
INSUL	INSULATION		
INTR	INTERIOR	YD	YARD
JAN	JANITOR		
JT	JOINT		

DRAWING SYMBOL LEGEND			
	COLUMN GRID		
	EXISTING WALLS BELOW THE ROOF		
	ROOM NAMES AND NUMBERS		
	ELEVATION MARK		
	DETAIL MARK		
	SECTION		
	AREA OF WORK		
	ENLARGED DETAIL CALL-OUT		
	REVISION REFERENCE, CLOUDED AREA REVISED		

GENERAL DEMOLITION NOTES

- ANY ITEM WHICH IS DESIGNATED TO REMAIN AND IS LOST OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- PROMPTLY REPAIR ADJACENT SURFACES DAMAGED BY DEMOLITION OPERATIONS.
- REMOVE DEMOLISHED MATERIALS AND DEBRIS FROM THE SITE IN A MANNER APPROVED BY THE PROJECT MANAGER. TRANSPORT AND LEGALLY DISPOSE OFF MATERIALS AT AN APPROVED OFF SITE LOCATION.
- UPON COMPLETION OF DEMOLITION WORK, REMOVE TOOLS, EQUIPMENT AND MATERIALS FROM SITE. REMOVE PROTECTIONS AND LEAVE SITE CLEAN.
- REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

EXISTING MATERIALS NOTES

MAINTENANCE BUILDING

- EXISTING ROOF IS EXPOSED FASTENER METAL PANEL.
- EXISTING DECKING IS PLYWOOD SHEATHING.

EXISTING CONDITIONS

- CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, SLOPES, AREAS, AND CONDITIONS. DIMENSIONS AND AREAS SHOWN ON THE DRAWINGS ARE APPROXIMATE.
- DRAWINGS IN THIS SET ARE NOT TO BE CONSIDERED MEASURED DRAWINGS OF AS-CONSTRUCTED CONDITIONS.
- FIELD MEASUREMENTS WILL BE REQUIRED TO COMPLETE THE WORK. THE CONTRACTOR SHALL OBTAIN ALL FIELD MEASUREMENTS AS NECESSARY TO FABRICATE ITEMS OF WORK AND TO COMPLETE THE WORK DEPICTED IN THE CONSTRUCTION DOCUMENTS.
- IF CONDITIONS ARE ENCOUNTERED WHICH DIFFER FROM CONDITIONS SHOWN OR SPECIFIED IN THE CONSTRUCTION DOCUMENTS, TO INCLUDE BUT NOT BE LIMITED TO DETERIORATED MATERIALS, OR DIFFERENT CONCEALED MATERIALS, CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND SHALL NOT PROCEED WITH ADDITIONAL WORK WITHOUT WRITTEN AUTHORIZATION.

PROPOSED MATERIALS NOTES

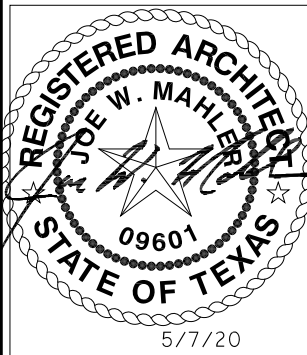
MAINTENANCE BUILDING

- NEW ROOFING MATERIAL SHALL BE EXPOSED FASTENER METAL PANEL TO MATCH COLOR ADJACENT BUILDINGS.
- NEW RAKE, EAVE FLASHING SHALL BE PRE-FINISHED STEEL BY ROOF PANEL MANUFACTURER. COLOR TO MATCH ROOFING PANEL.
- NEW GUTTERS AND DOWNSPOUTS MATERIAL AND COLOR TO MATCH ROOFING PANEL.
- NEW ROOFING TO BE BE CAPABLE OF RESISTING WIND SPEED OF 117Vmph (RISK CATEGORY II).
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SUBMITTALS TABLE

REQUIRED SUBMITTALS PRIOR TO INSTALLATION									
MATERIAL/ PRODUCT	MANUF.'S PRODUCT INFO	INSTALLATION INSTRUCTIONS	SAFETY DATA SHEETS	SAMPLE	LEGIBLE PHOTO OF THE MATERIAL	MANUFACTURERS' DRAWINGS/ SHOP DRAWINGS	MANUF.'S SAMPLE WARRANTY	OTHER /NOTES	
PLYWOOD DECKING	●	●	●						
FASTENERS FOR PLYWOOD	●	●							
ROUGH CARPENTRY-LUMBER	●								
FASTENERS- PRESSURE TREATED LUMBER	●	●							
METAL PANEL	●	●	●	●		●	●	SAMPLES TO PARK FOR APPROVAL	
FASTENERS FOR METAL PANELS	●	●							
FLASHING	●	●				●	●		
FOAM CLOSURE	●	●	●						
TAPE	●	●	●						
UNDERLAYMENT	●	●	●						
UNDERLAYMENT FASTENERS	●	●							
INSULATION	●	●	●						
CHICKEN WIRE & FASTENERS	●	●							
CAULKS	●	●	●						
METAL FRAMING ANCHORS	●	●							
GUTTERS, DOWNSPOUTS, & HARDWARE	●					●			

TEXAS
PARKS &
WILDLIFE



PDG
ARCHITECTS

LAKE LIVINGSTON STATE PARK
ROOF REPLACEMENT
PROJECT NUMBER:MR10354

DATE: 5-7-2020
DESIGN BY: RZ
DRAWN BY: RZ
REVIEW BY: DS
REVISED:

REVISED:

REVISED:

SHEET TITLE
ABBREVIATIONS,
NOTES &
SUBMITTALS

SHEET NUMBER

A0

SEE CLEARER PHOTOS
IN BID DOCUMENTS



H VIEW AT EXISTING ROOF

NEW ROOF PANELS TO
BE CONTINUOUS TO THE
ROOF RIDGE

CUT WOOD PURLINS
ENDS TO ALLOW
INSTALLATION OF NEW
FLASHING END RAKE
TRIM. REF. 06/A2.



F VIEW OF DAMAGE IN TOOL STORAGE AREA

REPLACE DAMAGED ROOF
DECKING. TYP.

REPLACE DAMAGED
WOOD PURLINS. TYP.

REPAIR DAMAGED TRUSS.
REF. STRUCTURAL.

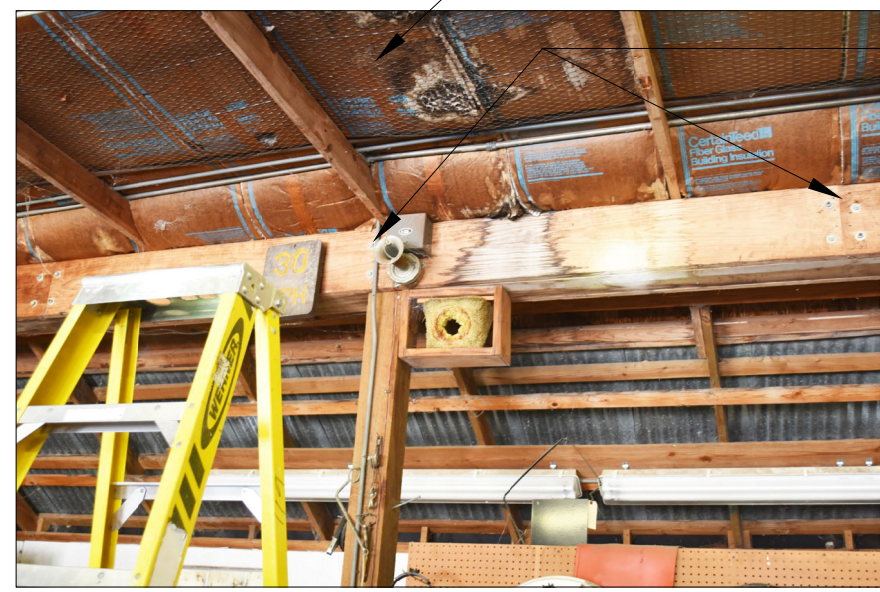


D EAST VIEW OF MAINTENANCE SHOP



B WEST VIEW OF MAINTENANCE SHOP

REPLACE FASCIA BOARD
TO MATCH EXISTING



I VIEW AT EXISTING BEAM

REMOVE INSULATION

REPLACE DAMAGED
SECTION OF 2X12 WOOD
BEAM. RE-USE EXISTING
FASTENERS.



G VIEW AT SHOP AREA

REMOVE INSULATION



E VIEW OF DAMAGE AT OPEN SPACE

REPLACE DAMAGED
ROOF DECKING. TYP.

REPLACE DAMAGED
WOOD PURLINS. TYP.



C NORTH VIEW OF MAINTENANCE SHOP

REMOVE AND REPLACE
METAL ROOF. TYP.

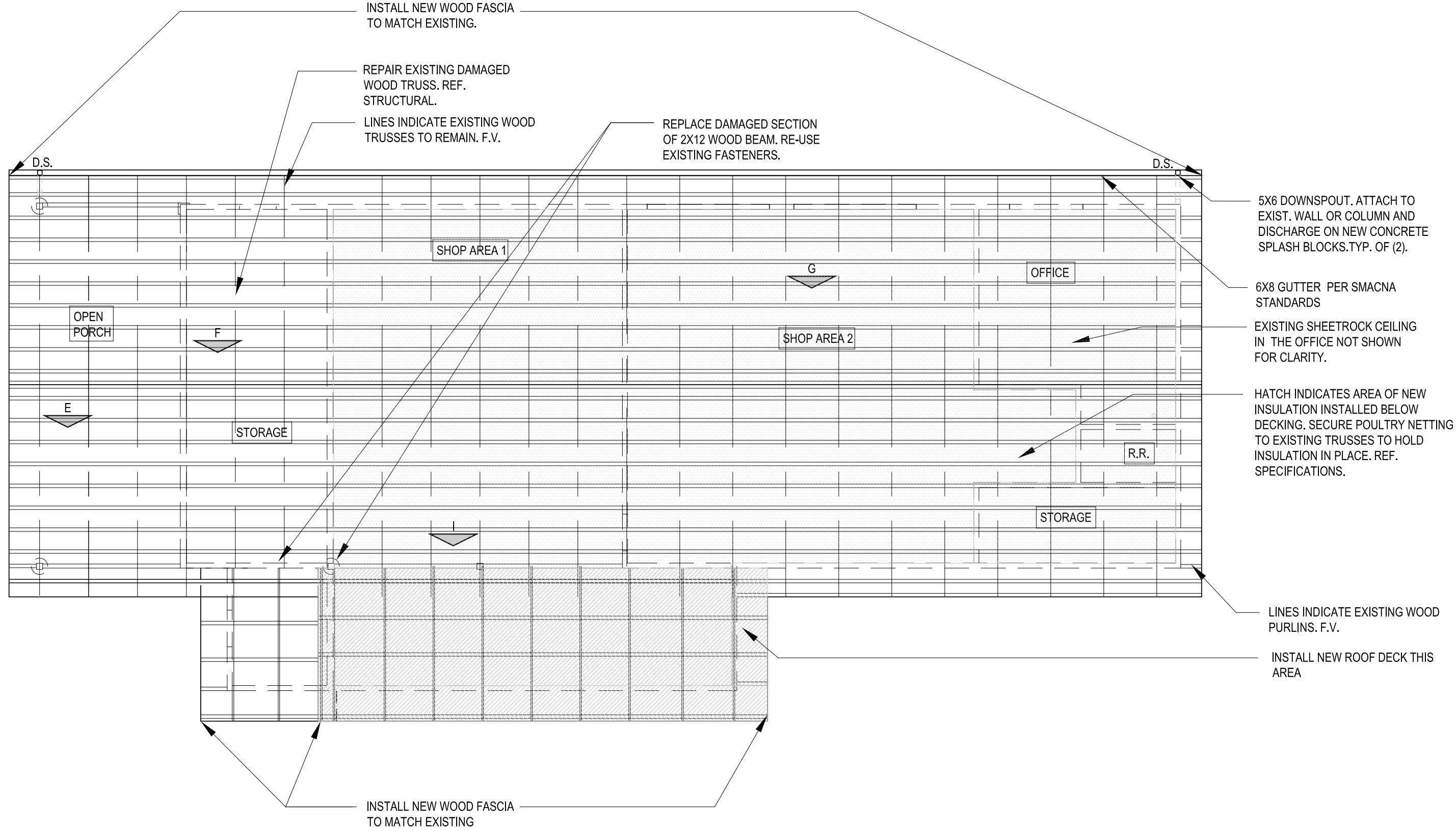


A SOUTH VIEW OF MAINTENANCE SHOP

SCALE:
N.T.S.

MAINTENANCE PHOTOS

02

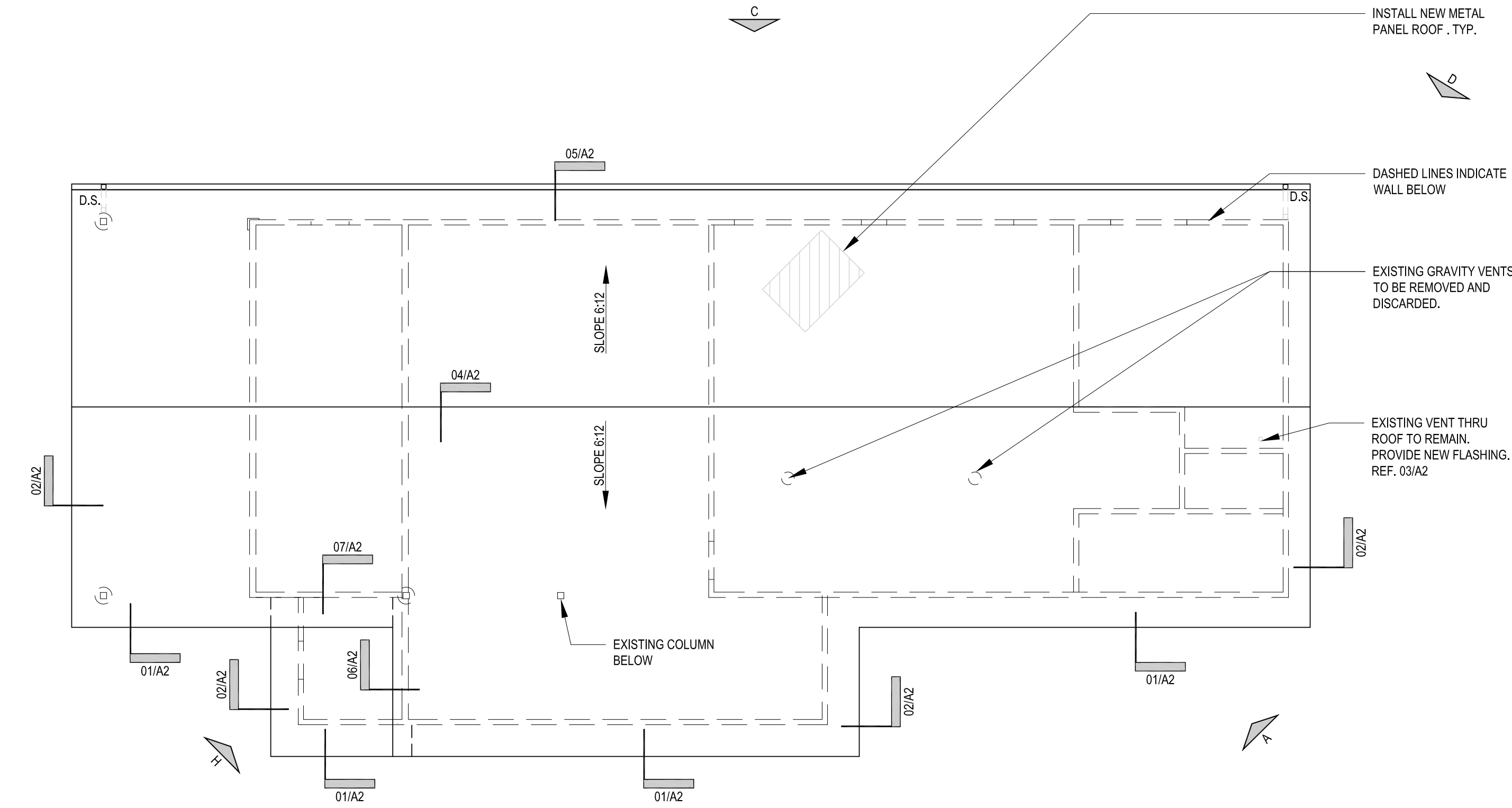


- NOTES:
1. REPLACE ROOF DECKING AND ALL DAMAGED WOOD PURLINS.
 2. CONTRACTOR TO ENSURE STABILITY OF THE STRUCTURE DURING REMOVAL AND REPLACEMENT OF ROOF DECKING AND ROOF PURLINS.
 3. CONTRACTOR TO CAREFULLY REMOVE AND REPLACE DAMAGED ROOF PURLINS. TO AVOID DAMAGE OF THE EXISTING ROOF TRUSSES.

0 SCALE: 8'-0"
1/8" = 1'-0"

MAINTENANCE REFLECTED CEILING PLAN

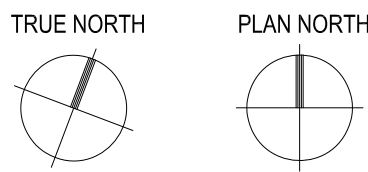
03



- NOTES:
1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS, AREAS AND QUANTITIES.
 2. SLOPES INDICATED ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY EXISTING SLOPES.
 3. ALL ROOF PENETRATIONS ARE SHOWN IN APPROXIMATE LOCATION. CONTRACTOR TO FIELD VERIFY EXACT LOCATION.

APPROXIMATE ROOF AREAS (SQ.F.)	
ROOF NAME	PLAN AREA
METAL PANEL	3,830

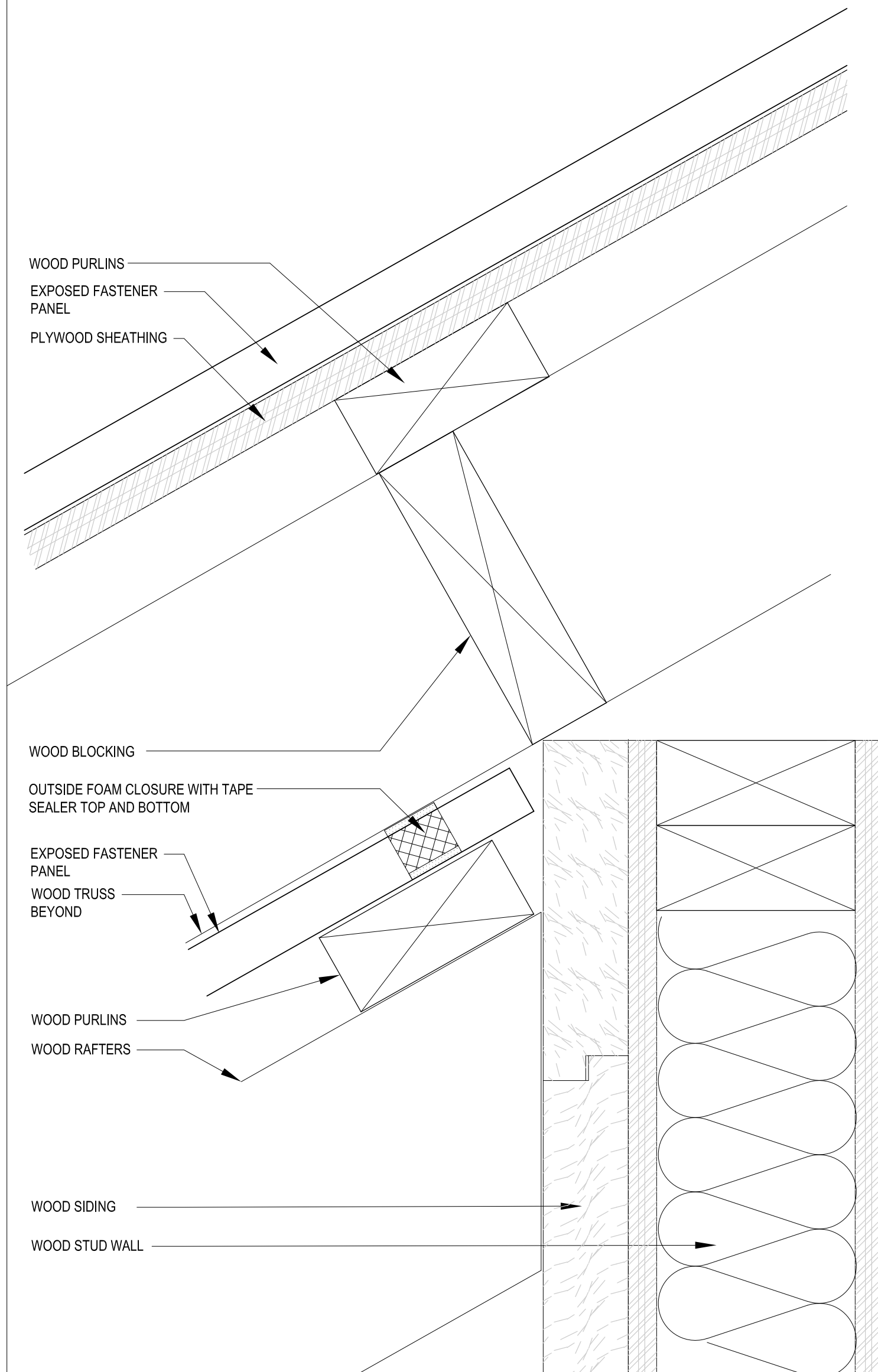
SEE PHOTO TAGS E,F,G, AND I IN REFLECTED
CEILING PLAN ABOVE



0 SCALE: 8'-0"
1/8" = 1'-0"

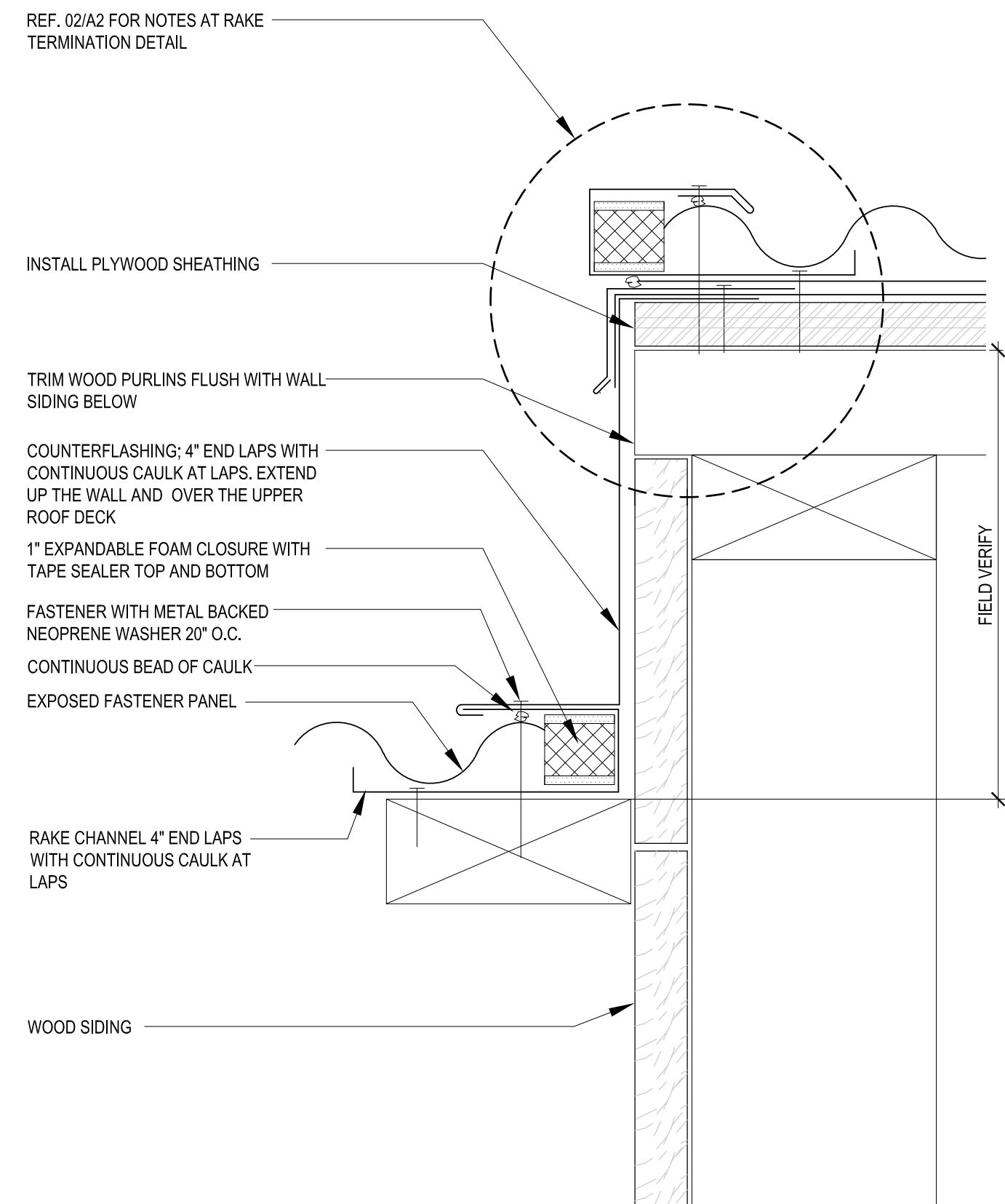
MAINTENANCE ROOF PLAN

01



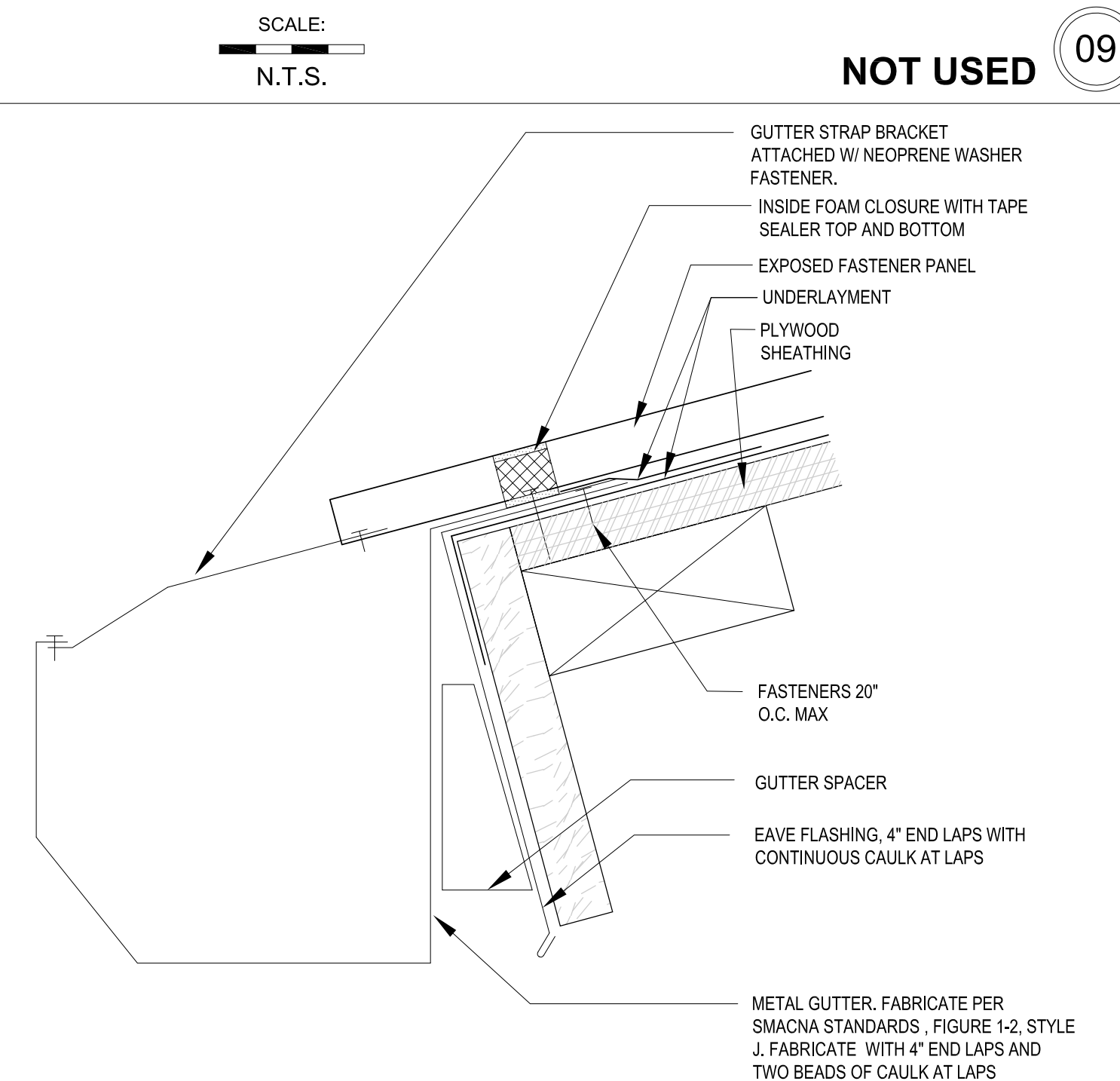
SCALE:
N.T.S.

EXPOSED FASTENER
HEADWALL DETAIL 07



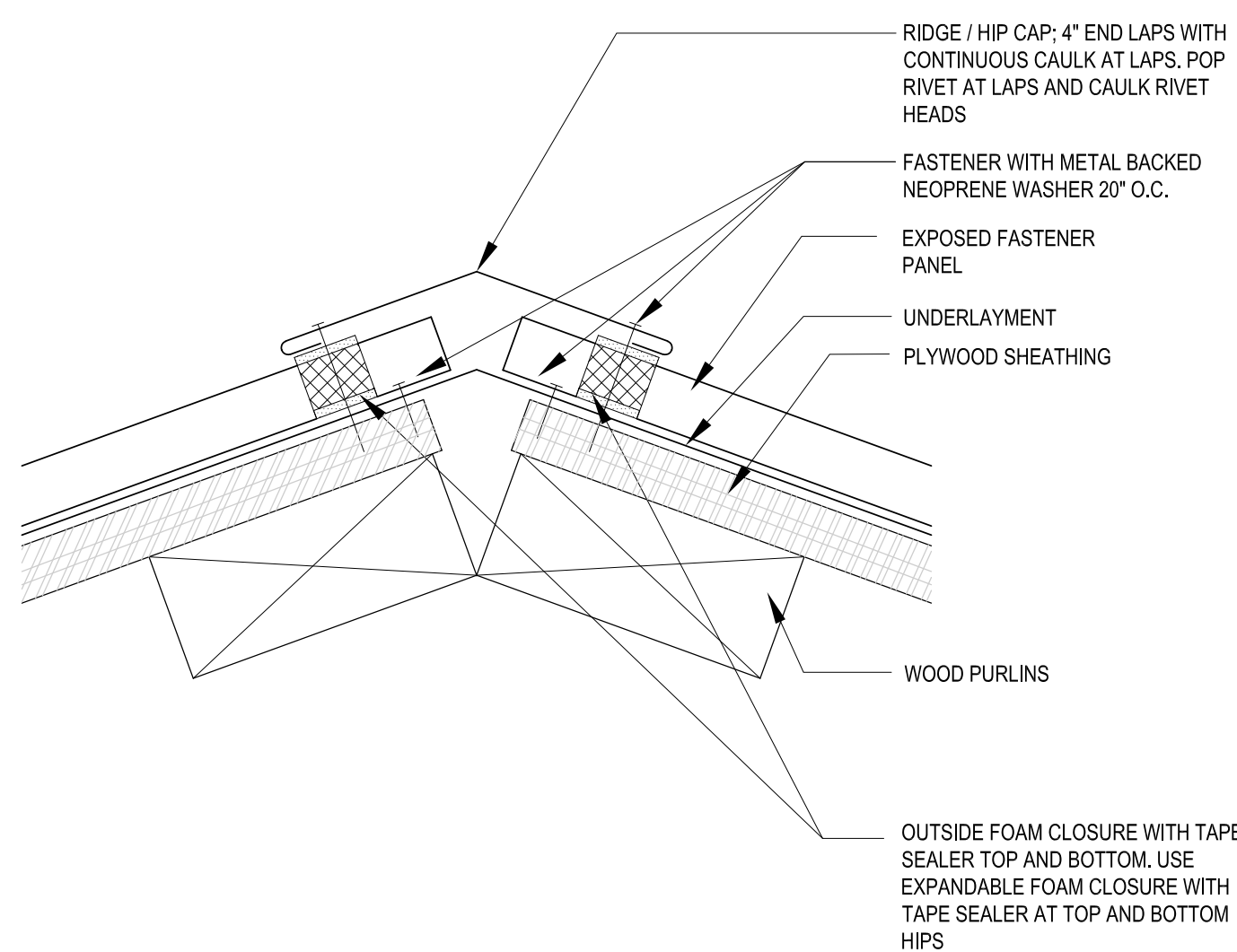
SCALE:
N.T.S.

SIDEWALL DETAIL 06



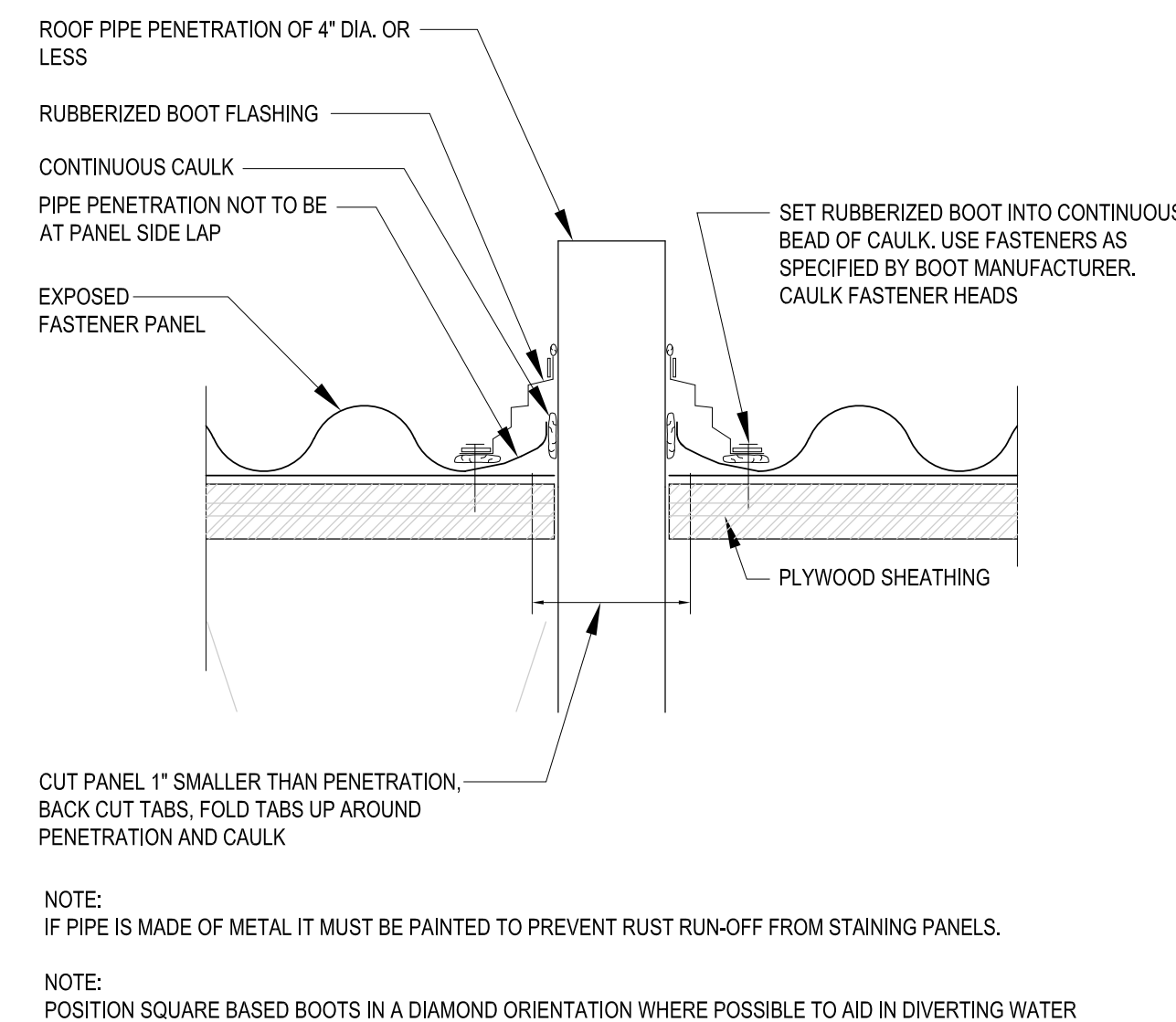
SCALE:
N.T.S.

EAVE GUTTER DETAIL 05



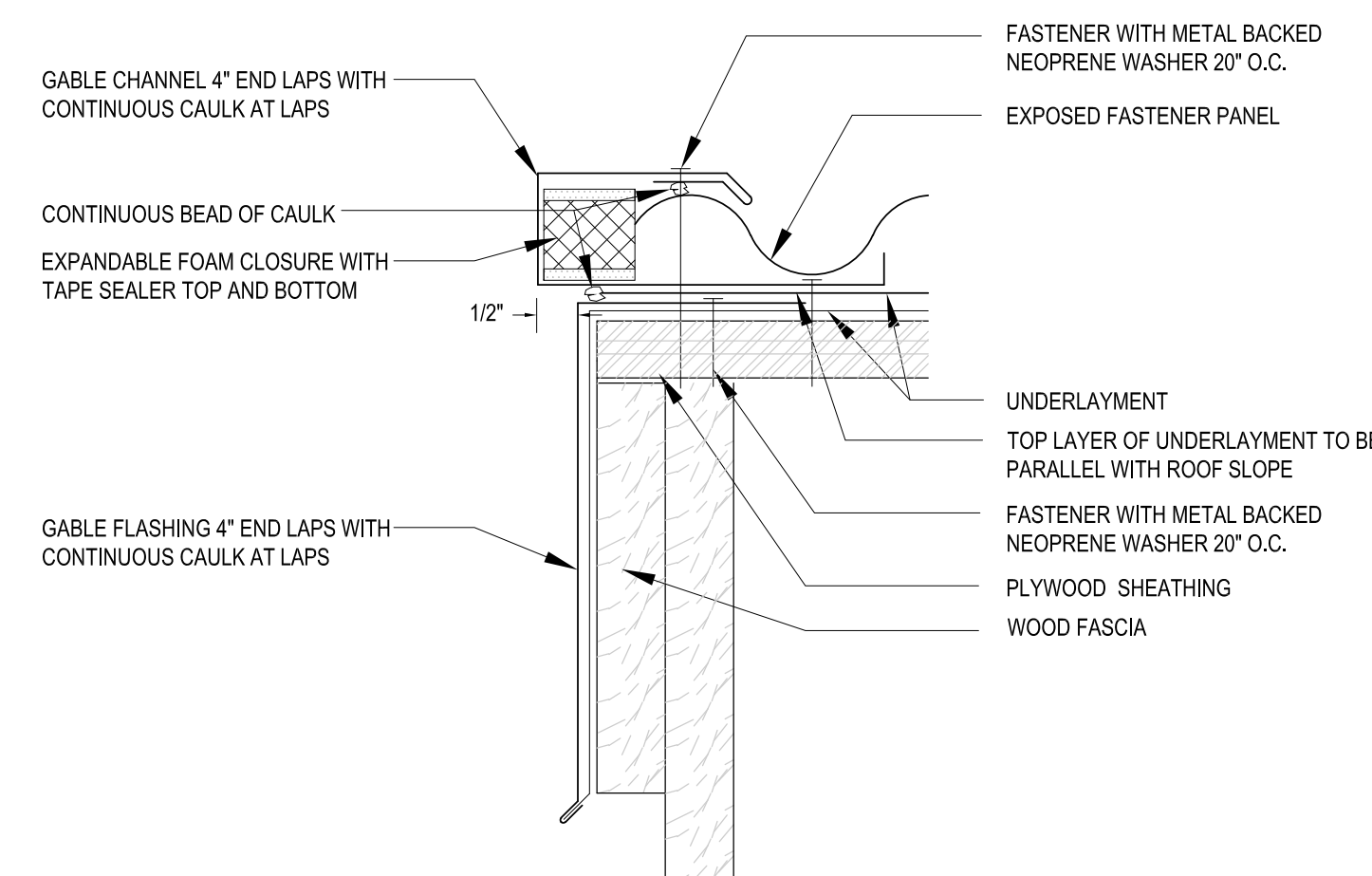
SCALE:
N.T.S.

RIDGE DETAIL 04



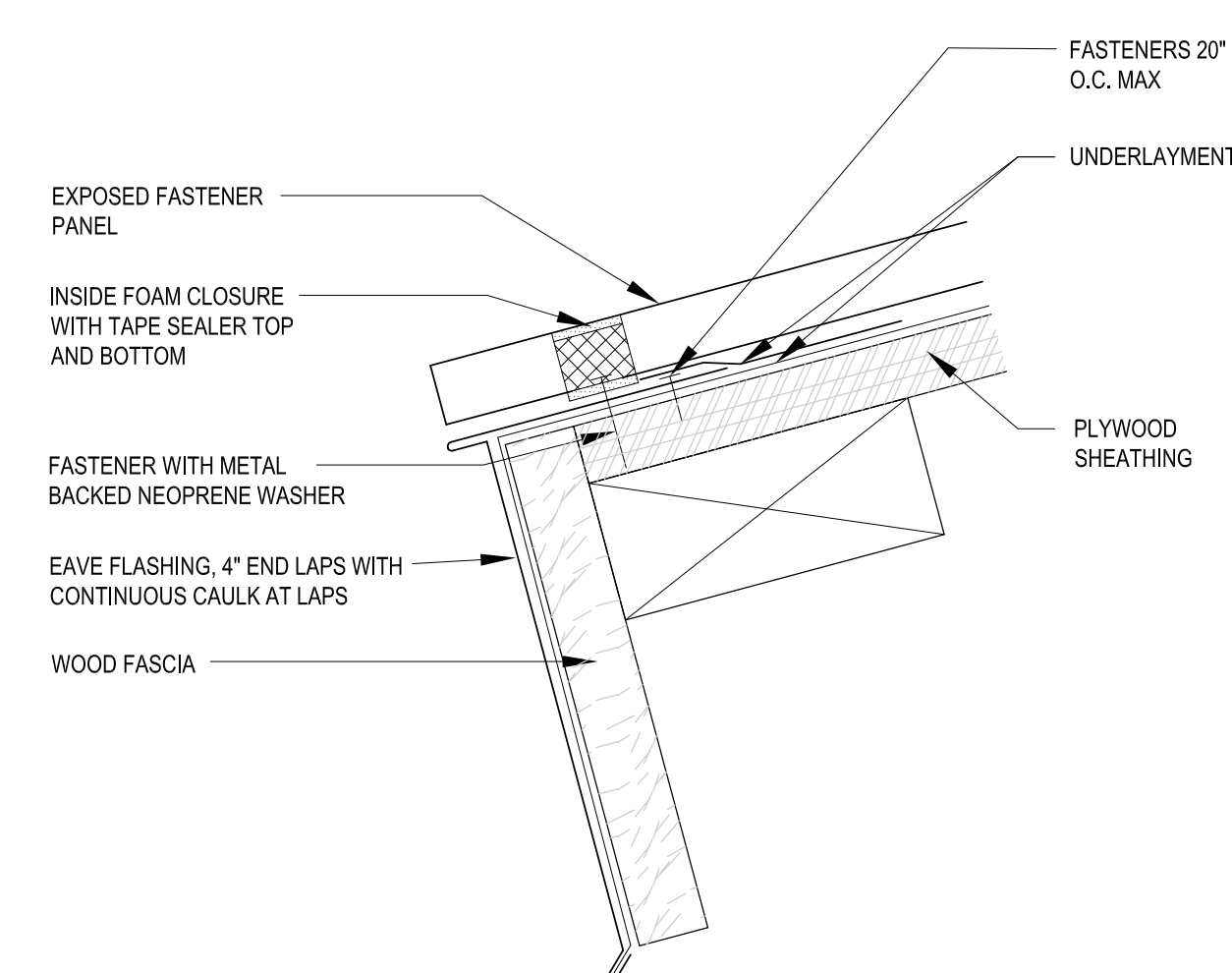
SCALE:
N.T.S.

PENETRATION DETAIL 03



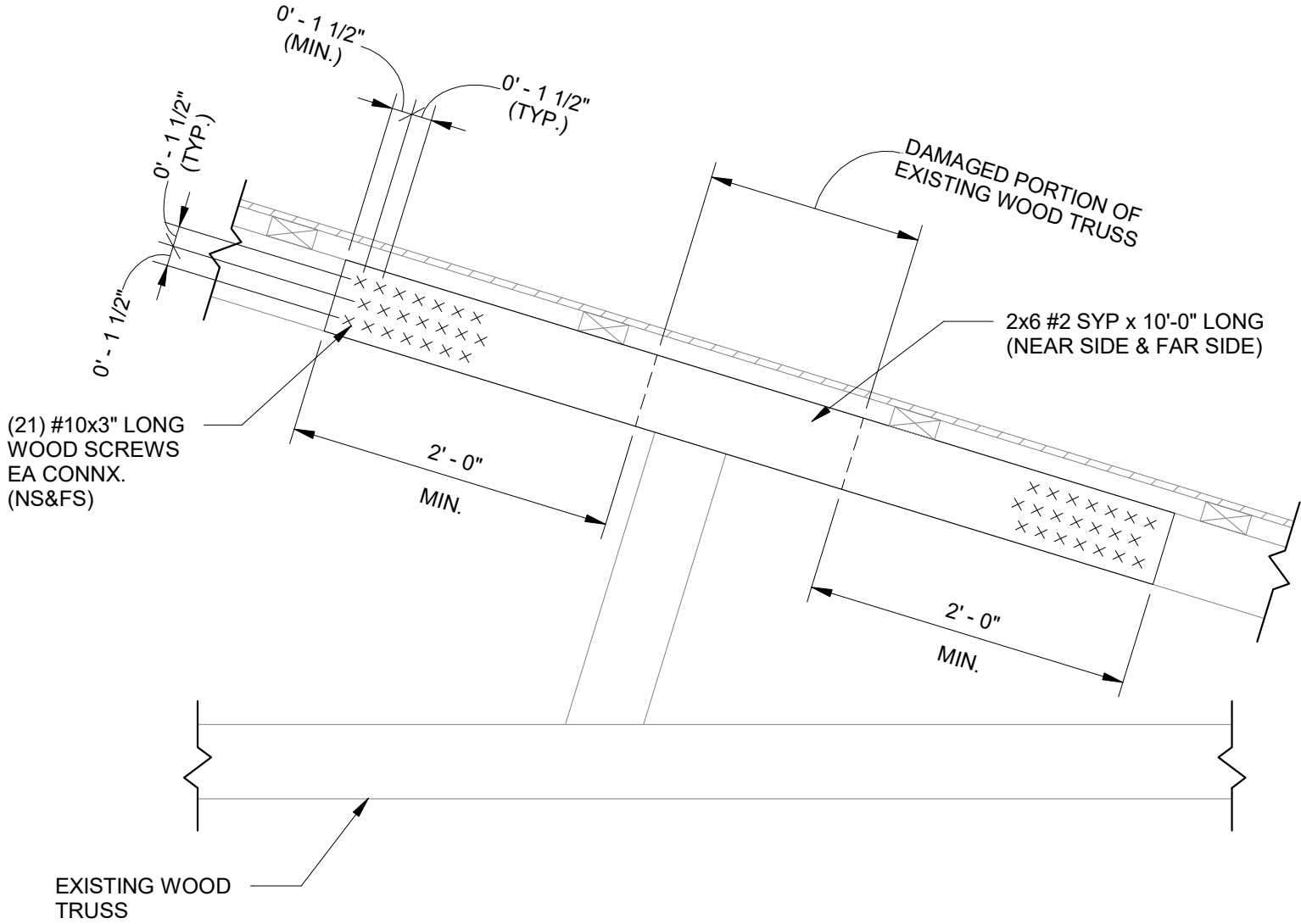
SCALE:
N.T.S.

RAKE FLASHING DETAIL 02



SCALE:
N.T.S.

EAVE FLASHING DETAIL 01



1 EXISTING TRUSS REPAIR DETAIL
1" = 1'-0"

STRUCTURAL NOTES:
1. REPAIR ALL WATER DAMAGED TRUSSES PER DETAIL 1S.1
2. REMOVE AND REPLACE ALL WATER DAMAGED WOOD DECKING, SLEEPERS, FRAMING, ETC. TO MATCH EXISTING CONSTRUCTION.
3. ALL WOOD IN UNCONDITIONED SPACE SHOULD BE PRESSURE TREATED.